

## SNL MESA Project MicroLab RFQ Amendments Log

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
28	AE1017, AE2101, AE4012.	11601 & 12345	<p>Elevation 13/AE2101 is labeled "Typical Lab".</p> <p>Enlarged floor plans of laboratories, 1-3/AE4012 reference these rooms to be Typical of Laser Lab, Electrical Lab and Chemical Lab. Please provide elevations for the casework and fume hoods in these rooms.</p> <p>The floor plans (example drawing AE1017) reference rooms called out as Photonic Device Lab, MEMS &amp; Optical Lab, Semi-Conductor Lab, Device Assembly Lab &amp; Material Char. Lab. Please advise which one of the lab rooms noted above (i.e. Laser, Electrical &amp; Chemical Lab) apply to these lab rooms.</p>	5/20/2003	<p><b>The enlarged floor plans on drawing #AE4012 are issued for reference only. The items depicted in a dashed line represent items to be installed by the owner at occupancy under a separate contract. The refrigerator/freezer shown will be Sandia furnished and installed during occupancy. The quantity and locations of sinks with casework shown as part of the base build in these typical lab layouts can be found on the floor plans (AE1017, AE1018, AE1027, AE1028, AE1037, AE1038). Refer to Volume BA1.2 for the quantity, types and locations of fume hoods. A typical elevation for these items is shown on AE2101. See attached drawing (AE1028858EL - seq. 97) for additional clarification of fumehood and casework with sinks.</b></p> <p><b>Laser interlock systems are required for all the laser labs as noted on the power plans in Volume BA1.3.</b></p>	Y	3	5/28/2003
29	AE4012.	Drawing	Enlarged Lab Plans on drawing AE4012 reference Equipment and Collateral Equipment. Please advise if this equipment is OFOI, OFCI or CFCL.	5/20/2003	<b>This equipment is OFOI (owner furnished &amp; installed), except for cabinets and fume hoods shown on floor plans and scheduled on mechanical drawings.</b>	N	3	5/28/2003
30	M17024858EL	Drawing	<p>Drawing M17024858EL (sequence #112) shows the LAB Room Controller (LRC)</p> <p>communicating on the Siemens "FLN", which would make it Siemens model #546-00362. But, the drawing does not show the Fume Hood Controller communicating on the "FLN". Is this the intent? or does this controller also need to communicate across the Siemens "FLN" to the MBC and Siemens graphical workstations? There does not appear to be a specification for this device, nor model number listed on the plans. If the intention is to have this communicate, then the Siemens model number would be 546-00555. If not, could you please give list of 'acceptable to Sandia' manufacturers &amp; models for this Fume Hood Controller to aid in our bid preparation.</p>	5/20/2003	<b>Each fume hood controller reports to the LRC through the FFN. The LRC controls the room supply and exhaust, and reports over the FLN. Specific controller part numbers are dependent on configuration and verified at submittal. Reference M17023858EL (seq. 111).</b>	N	3	6/2/2003

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31	8/SB3001858EL	Section	Please provide dimensions for typical tie beam shown on 8/SB3001858EL.	5/20/2003	<b>Tie beams shall be 12" x 12"</b>	N	3	5/28/2003
32	SB1003858EL	Drawing	Refer to Drawing SB1003858EL. The elevation mark for the grade beam shows a top of grade beam elevation of 81' 4." Section 7/SB3001 shows the top of grade beam 8" below bottom of slab. This would put the top of grade beam at 80' 10." Please clarify.	5/20/2003	<b>Top of grade beam elevation = 81'-4". The 8" dimension in 7/SB3001 should be from top of slab to top of grade beam.</b>	N	3	5/28/2003
33	SB1005858EL Section 3/SB3003	Drawing	Refer to drawing SB1005858EL. Section 3/SB3003 shown at the bridge foundation calls for a 2'4" thick mat foundation. The elevations shown calls for TOD @95'8" and t/o Cap @ 98'8." This would be a thickness of 3'0." Please clarify.	5/20/2003	<b>Top of drilled pier and top of cap are correct. Change the pier cap thickness on 3/SB3003 from 2'-4" to 3'-0".</b>	N	3	5/28/2003
34	SB1005858EL	Drawing	Refer to drawing SB1005858EL. What is the size of the pedestal for the bridge (Section 18A/SB3001)?	5/20/2003	<b>Pedestal is 20" diameter round at section 18A as stated in the note at the left side of section 18A/SB3001.</b>	N	3	5/28/2003
35	5/SB3002858EL	Section	Section 5/SB3002858EL shows a 30lb felt joint between the slab on grade thickened edge and the grade beam. Should section 3/SB3001858 have the same type of joint or does it only occur at this one location?	5/20/2003	<b>Felt joint is only required at 5/SB3002.</b>	N	3	5/28/2003
36	Comment	General	What are the structural fill requirements under the slab on grade and pier caps for the MicroLab project?	5/20/2003	<b>For fill requirements follow Specification Section 02200S and note "Earthwork" on sheet S-0001.</b>	N	3	5/28/2003
42	Sheet MH5002858EL	Detail 5	Detail 5 on sheet MH5002858EL indicates insulation on the supply air diffuser. Is insulation on grilles, registers or diffusers required on this project?	5/21/2003	<b>Yes, the insulation on grilles, registers or diffusers are required on this project.</b>	N	3	5/28/2003
48	MH5002858EL	Detail #5	Detail #5 MH5002858EL shows insulation covering the diffusers. What type and how thick is this insulation.	5/23/2003	<b>1" Fiberglass insulation .</b>	N	3	6/2/2003
49	#4 on MH1008858EL	General	General note #4 on MH1008858EL states that all duct and equipment suspended from the structure shall be vibrationally isolated per Seismic Spec 13085 and references MH5001858EL. Detail #2 on MH5001858EL mentions California Facilities. Are these details for California only or are they to be used for the MESA Project also?	5/23/2003	<b>Disregard note referencing California. Provide vibration isolation per specification 13085 and references MH5001858EL. References to vibration isolation MH5001898 should read MH5001858EL.</b>	N	3	6/2/2003
50	Seq 113	Section	The South Elevation on Seq. 113 indicates precast	5/27/2003	<b>The pre-cast window below window "D" will stop at</b>	N	3	6/2/2003

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			wall panels above and below the large window marked "D" between Grids 3 and 3.5. These panels cover the south face of Column 3K. The First Floor Plan on Seq. 086 indicates the window frame covering the east half of the south face of Column 3K and what appears to be a precast panel covering the west half. The Upper Floor Plans on Seq. 095 and 104 show the west half of the south face of Column 3K exposed to view. Is there a missing nominal 6" x 12" wall panel at the southwest corner on Seq. 095 and 104?		and align with the edge of the window frame. The EIFS material on the shear wall will wrap around the corner and flash into the window frame. Refer to responses to questions #51 and 53 for additional information.			
51	113 and 117	Sequence	The South Elevations on Seq. 113 and 117 indicate precast wall panels on Grid D, between Grids 0.5 and 2, but the Floor Plans on Seq. 083, 092 and 101 do not. This is further complicated by the fact that Section 2 on Seq. 120 indicates the finish on this wall is "EIFS ON CONC. SHEAR WALL". What is the Architect's intent for this wall?	5/27/2003	All exposed cast-in-place concrete will receive EIFS finish on the surface. It is the intent of the drawings to use EIFS on cast-in-place concrete above the large canopy in lieu of hanging pre-cast panels.	N	3	6/2/2003
53	114	Sequence	West Elevation on Seq. 114 shows wall panels from Grid Line J to K. The Floor Plans on Seq. 89, 98 and 107 do not. Please Clarify?	5/27/2003	It is the intent of the drawings to use EIFS on cast-in-place concrete above the large canopy in lieu of hanging pre-cast panels.	N	3	6/2/2003
54	BA1.1, Sequence Sheet 009	Section	Please clarify concrete PSI for waffle slab. Volume BA1.1, sequence sheet 009 says all concrete is 4000 psi. Spec 03300 page 11 say to use 6000 psi but it reference the Fab in lue of this Lab.	5/27/2003	The strength of all concrete for the MicroLab facility is 4000 psi. As stated in the spec 03300, the strength of 6000 psi is for the Fab only.	N	3	6/2/2003
57	16720S-8, paragraph 3.09	Section	Section 16720S-8, paragraph 3.09, of the Project Manual (volume 2) states that all installers performing work on the Access Control and Alarm Monitoring System shall have a government issued Q-clearance. Is this correct?	5/27/2003	Refer to Addendum #2 (item #11 response).	N	3	5/27/2003
58	Comment	General	Can you direct to information on the procedure for a contractor to obtain a Q-clearance to perform installation work on the Security System for the MicroLab project.	5/27/2003	Refer to Addendum #2 (item #11 response).	N	3	5/27/2003
60	FA1.1-2 Sequence sheet 027.	Volume	Volume FA1.1-2 Sequence sheet 027. Note #12. Are the bus stops owner furnished and contractor installed as the detail 4 reference(which on the	5/28/2003	The bus stop shelter, bench and signage shall be contractor furnished and installed (refer to attached bus shelter detail).	Y	3	5/30/2003

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	Note #12		MESA Fab project had the mfg info) was taken out of this set of site drawings					
61	16442	Specification	<p>The Electrical Bid Specification 16442 ELECTRICAL POWER PANELBOARDS used in the MicroFab RFQ 4561 contained the following Sandia National Lab Specification: Part 3.05E - E. Special Testing Requirements: Panel board main breakers and circuit breakers feeding branch circuits rated 200 A and above, shall be tested prior to initial energization of system.</p> <p>1.Independent testing organization shall perform tests to ensure that electrical equipment is operational and within industry and manufacturer's tolerances, and is installed in accordance with design specifications.</p> <p>2.Perform testing in accordance with circuit breaker testing requirements of NETA ATS.</p> <p>3.Tests and inspections shall determine suitability for energization.</p> <p>4.Other circuit breakers require this special testing when indicated on Drawings.</p> <p>The Electrical Bid Specification 16442 ELECTRICAL POWER PANELBOARDS used in the MicroLab RFQ 4632 does NOT contain the Sandia National Lab Specification: Part 3.05E</p> <p>Question 1 Is this an oversight, or was this specification deliberately removed from the MicroLab RFQ 4632?</p> <p>Question 2 Will the missing Specification 16442, Part 3.05E be included or excluded from the MicroLab RFQ 4632?</p>	5/29/2003	<p>(1) The special testing requirements was deliberately deleted from the MicroLab RFQ.</p> <p>(2) 3.05E is excluded from the MicroLab RFQ 4632.</p>	N	3	6/3/2003

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63	Comment	General	Where can we return the OUO Micro Lab prints early? We have opted not to bid the Micro Lab. For security we would like to return these to government control.	5/29/2003	<b>Please contact the MESA Document Control group (284-4307, 844-4032, or 845-9726) to make arrangements.</b>	N	3	5/29/2003
64	Amendment #2	Question 22	<p>Original Question:</p> <p>Spec 02447 &amp; 08460 Auto entrance doors. Do these exist? Can't find on arch or elec dwgs</p> <p>Original Response:</p> <p>Automatic entrance doors occur at doors 1012 &amp; 1012B. Including card reader/push button pylons. Refer to drawing AE1016858EL Seq 086.</p>	5/30/2003	<p><b>CLARIFICATION:</b></p> <p><b>The attached three sketches (ske-001-(64), ske-002-(64), ske-003 (64)) provide the electrical information for the automatic entrance doors.</b></p>	Y	3	5/29/2003
65	General	Comment	Programming for the MBCs and TECs is by Sandia FCS. But the normal/current 'Sandia Standards' requires the contractor to be responsible for loading the application software and starting up each TEC, (which requires a Siemens software tool). Is this project to be done according to normal Sandia FCS standards, or will this project be different?	5/30/2003	<b>SNL shall provide all Facility Control System Programming however, application software loading required at each TEC (and TEC startup) shall be done by CAC, an authorized Siemens representative for the State of New Mexico. Application software for a particular control device is different from FCS programming to run all equipment per the established control sequence of operations. Refer to Specification 13943.</b>	N	3	
66	General	Comment	Siemens provides products to SNL through an exclusive distributor. This distributor is also a control system installer thereby becoming a sole source installer for the control system on this project. Are there any other options or opportunities for a control system installer, with extensive experience in fabrication facility control system installation, to provide a bid on this project?	5/30/2003	<b>SNL's position regarding the installation of Siemens control devices does allow and encourages independent contractors to install Siemens Building Technologies Terminal Equipment Controllers (TEC's), and other Siemens field control devices. However, the startup and commissioning of the TEC's or other Siemens products shall be done by CAC, an approved Siemens authorized company. This means that the contractor can purchase, install and wire the Siemens products per the manufacturer's instructions, but CAC shall startup and commission these devices.</b>	N	3	6/2/2003
67	3 SFM and	Section	Tab 3 of Volume 1 of the specifications identifies	5/30/2003	<b>1.1 MBC's (Modular Building Controller) and EDC's</b>	N	3	6/2/2003

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	Spec		<p>MBC panels, MBC internal components, and programming as being provided by SNL.</p> <p>Specification Section 15910S 2.02.A refers to Expanded Digital Controllers (EDC's) and 2.02.B refers to VAV Terminal Unit Controllers (TUC's). Plan Page MI1006858EF (and others) refers to TEC's for VAV control. Plan Page MI7019858EF (and others) refers to CT's for VAV control.</p> <p>Question #1.1 Are MBC's and EDC's the same thing?</p> <p>Question #2.2 Are TUC's, TEC's, and CT's the same thing?</p> <p>Question #1.3 Are MBC's, EDC's, TUC's, TEC's, and CT's all being provided by SNL?</p> <p>Question #1.4 Are MBC's, EDC's, TUC's, TEC's, and CT's all being programmed by SNL?</p> <p>2. Plan Page MI7032858EF (and others) seems to indicate that the VAV monitoring and control points are to be brought into an MBC panel, in this case MBC "M". The above mentioned drawings seem to indicate that these same points are brought into TEC's/CT's and not into MBC's.</p> <p>Question: Which drawing is correct with regards to the connection point for the VAV monitoring and control points?</p>		<p>(Expanded Digital Controller) are the same. The contractor shall use the term MBC wherever mentioned in this contract. The contractor shall understand that SNL shall supply all MBC panels and their internal components for this job. The contractor shall install each MBC and terminate all control devices to each MBC. All MBC panels are Siemens Building Technologies, Landis Division System 600 Apogee panels.</p> <p>2.2 TUC's, TEC's and CT's are the same. The contractor shall use the term TEC (terminal equipment controller) wherever mentioned for this contract instead of TUC's and CT's. TEC's shall be Siemens Building Technologies, Landis Division for this contract. No other manufacturer will be accepted due to their incompatibility with SNL's Facility Control System (FCS).</p> <p>1.3 MBC's (or EDC's) and their internal components shall be supplied by SNL. TEC's (or CT's/TUC's) shall be supplied and installed by the contractor.</p> <p>1.4 SNL shall provide all necessary Facility Control System (FCS) programming, which includes the programming for MBC's and TEC's. Any other control device that is not part of the FCS, shall be the responsibility of the contractor (i.e. chiller control panels, flow meters, or other devices that have their own standalone control system).</p>			
69	INSTRUCTION #14 - BEST VALUE CRITERIA, SECTION III - PROJECT MANAGEMENT, #1	RFQ	<p>Is the schedule referenced in this section specific to the MicroLab project?</p> <p>Does the schedule have to be resource and cost loaded?</p>	5/30/2003	<p>The Schedule referenced in Part #1, should be a MicroLab specific schedule reflecting the Contractors proposed project schedule (project start to finish) and major work elements. This schedule is not cost and/or resource loaded.</p> <p>NOTE: The schedule referenced in Part #2 - is a past</p>	N	3	6/2/2003

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					project schedule that is resource and cost loaded.			
70	GENERAL	GENERAL	What is Sandia's project management software?  Is the Contractor required to use that software?	5/30/2003	SNL uses Primavera and Expedition. Contractor is required to use Primavera.	N	3	6/2/2003